## Claims

1. The use of alkoxylated dendrimers having a molecular weight of from 2400 to 100 000 g/mol which have been alkoxylated with C2-C4-alkylene oxide groups or a mixture of such alkylene oxide groups such that the alkoxylated dendrimer has a degree of alkoxylation of from 1 to 100 alkylene oxide units per free OH group, for breaking oil/water emulsions, in amounts of from 0.0001 to 5% by weight, based on the oil content of the emulsion to be broken.

10

5

2. The use as claimed in claim 1, where the dendrimer is a dendritic polyester based on a mono-, di- or polyfunctional starting alcohol and a carboxylic acid as dendritic growth component which has at least two hydroxyl groups.

15

25

- 3. The use as claimed in claim 1 and/or 2, where the starting alcohol used is bis(trimethylolpropane), bis(trimethylolethane), dipentaerythritol, pentaerythritol, alkoxylated pentaerythritol. trimethylolethane. trimethylolpropane. alkoxylated 20 trimethylolpropane, glycerol, diglycerol, triglycerol, polyglycerol, neopentyl glycol, dimethylolpropane, sorbitol or mannitol.
  - 4. The use as claimed in one or more of claims 1 to 3, where the carboxylic acid to the dendritic chain growth is dimethylolpropanoic acid,  $\alpha,\alpha$ -bis(hydroxymethyl)butanoic acid,  $\alpha,\alpha$ -bis(hydroxymethyl)ethanoic acid,  $\alpha,\alpha$ -bis(hydroxymethyl)pentanoic acid,  $\alpha,\alpha$ -bis(hydroxy)propanoic acid or 3,5-dihydroxybenzoic acid.
- 5. The use as claimed in one or more of claims 1 to 4, where the alkoxylated dendrimers have a molecular weight of from 10 000 to 50 000 g/mol.
- 6. The use as claimed in one or more of claims 1 to 5, in which the average degree of alkoxylation is between 1 and 70 alkylene oxide units per free OH group.
  - 7. The use as claimed in one or more of claims 1 to 6, in which the alkylene oxide is ethylene oxide or propylene oxide.

8. The use as claimed in one or more of claims 1 to 7, in which a mixed alkoxylation with ethylene oxide and propylene oxide in the ratio from 1:2 to 1:10 is present.

5

10

15

20

9. The use as claimed in one or more of claims 1 to 8, where the alkoxylated dendrimers are crosslinked using bisphenol A diglycidyl ether, butane-1,4-diol diglycidyl ether, hexane-1,6-diol diglycidyl ether, ethylene glycol diglycidyl ether, cyclohexanedimethanol diglycidyl ether, resorcinol diglycidyl ether, glycerol diglycidyl ether, glycerol triglycidyl ether, glycerol propoxylate triglycidyl ether, polyglycerol polyglycidyl ether, p-aminophenol triglycidyl ether, polypropylene glycol diglycidyl ether, pentaerythritol tetraglycidyl ether, sorbitol polyglycidyl ether, trimethylolpropane triglycidyl ether, castor oil triglycidyl ether, diaminobiphenyl tetraglycidyl ether, soya oil epoxide, adipic acid, maleic acid, phthalic acid, maleic anhydride, succinic anhydride, dodecylsuccinic anhydride, phthalic anhydride, trimellitic anhydride. pyromellitic anhydride, diethoxydimethylsilane, dimethoxydimethylsilane, toluene

diisocyanate, diphenylmethane diisocyanate.